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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,607	05/23/2001	Peter J. Brittenham	RSW920010106US1	3651
46589	7590	07/23/2007		
MYERS BIGEL SIBLEY SAJOVEC P.A. PO BOX 37428 RALEIGH, NC 27627			EXAMINER EL CHANTI, HUSSEIN A	
			ART UNIT	PAPER NUMBER
			2157	
			MAIL DATE	DELIVERY MODE
			07/23/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Supplemental

Notice of Allowability

Application No.	Applicant(s)	
09/864,607	BRITTENHAM ET AL.	
Examiner	Art Unit	
Hussein A. El-chanti	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1.  This communication is responsive to 6/12/2007.
- 2.  The allowed claim(s) is/are 25,26,28,31-44,47 and 52-57.
- 3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All b)  Some\* c)  None of the:
    - 1.  Certified copies of the priority documents have been received.
    - 2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  - 5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
    - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- 6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1.  Notice of References Cited (PTO-892)
- 2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3.  Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
- 4.  Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5.  Notice of Informal Patent Application
- 6.  Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
- 7.  Examiner's Amendment/Comment
- 8.  Examiner's Statement of Reasons for Allowance
- 9.  Other \_\_\_\_\_



ARIO ETIENNE

SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

### EXAMINER'S AMENDMENT

1. This action is responsive to amendment received on June 12, 2007.
2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Scott Hatfield on June 19, 2007.

3. The application has been amended as follows:

**56. (currently amended)** A computer program product for dynamically undeploying services in a computing network, the computer program product ~~embedded~~ stored on one or more computer-readable storage media ~~and that when executed perform the~~ steps comprising:

~~computer-readable program code that is configured to receive~~ receiving an undeployment trigger for a selected service;

~~computer-readable program code that is configured to determine~~ determining one or more network locations where the selected service is deployed responsive to receiving the undeployment trigger;

~~computer-readable program code that is configured to effecting~~ effecting a dynamic undeployment by programmatically removing the selected service from one or more selected ones of the network locations responsive to receiving the undeployment trigger,

wherein services comprise web services,

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~~wherein the computer-readable program code that is configured to receive~~  
~~wherein receiving~~ an undeployment trigger comprises ~~computer-readable program code~~  
~~that is configured to receive~~ receiving an undeployment trigger for a selected web  
service in the computing network,

~~wherein the computer-readable program code that is configured to determine~~  
~~determining~~ one or more network locations comprises ~~computer-readable program code~~  
~~that is configured to determine~~ determining one or more network locations where the  
selected web service is deployed in the computing network,

~~wherein the computer-readable program code that is configured to effecting~~ a  
dynamic undeployment comprises ~~computer-readable program code that is configured~~  
~~to effecting~~ a dynamic undeployment by programmatically removing the selected web  
service from one or more selected ones of the network locations in the computing  
network, and

wherein the undeployment trigger is based upon usage of the selected service at  
the network locations, and wherein the usage is an average number of client requests  
for the selected service within a predetermined time interval;

~~computer-readable program code that is configured to sending~~ the undeployment  
trigger to all of the network locations;

~~computer-readable program code that is configured to shutting~~ down the selected  
service at the network locations, responsive to receiving the undeployment trigger, and  
removing executed code which implements the selected service from a run-time  
environment of each network location;

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~~computer-readable program code that is configured to shutting~~ down the selected service at the origin server responsive to receiving the undeployment trigger, and removing executed code which implements the selected service from a run-time environment of the origin server; and

~~computer-readable program code that is configured to make~~ making the selected service unlocatable in the computing network.

**57. (currently amended)** A computer program product for dynamically undeploying services in a computing network, the computer program product ~~embedded~~ stored on one or more computer-readable storage media ~~and that when executed perform the~~ steps comprising:

~~computer-readable program code that is configured to receive~~ receiving an undeployment trigger for a selected service;

~~computer-readable program code that is configured to determine~~ determining one or more network locations where the selected service is deployed responsive to receiving the undeployment trigger;

~~computer-readable program code that is configured to effecting~~ a dynamic undeployment by programmatically removing the selected service from one or more selected ones of the network locations responsive to receiving the undeployment trigger,

wherein services comprise web services,

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~~wherein the computer-readable program code that is configured to receive~~  
~~wherein receiving~~ an undeployment trigger comprises ~~computer-readable program code~~  
~~that is configured to receive~~ receiving an undeployment trigger for a selected web  
service in the computing network,

~~wherein the computer-readable program code that is configured to determine~~  
~~determining~~ one or more network locations comprises ~~computer-readable program code~~  
~~that is configured to determine~~ determining one or more network locations where the  
selected web service is deployed in the computing network,

~~wherein the computer-readable program code that is configured to effecting~~ a  
dynamic undeployment comprises ~~computer-readable program code that is configured~~  
~~to effecting~~ a dynamic undeployment by programmatically removing the selected web  
service from one or more selected ones of the network locations in the computing  
network, and

wherein the undeployment trigger is an undeployment request issued by an  
origin server from which the selected service was initially deployed, wherein the  
undeployment trigger is based upon usage of the selected service at the network  
locations, and wherein the usage is an average number of client requests for the  
selected service within a predetermined time interval;

~~computer-readable program code that is configured to sending~~ the undeployment  
request to all of the network locations;

~~computer-readable program code that is configured to shutting~~ down the selected  
service at the network locations, responsive to receiving the undeployment trigger, and

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removing executed code which implements the selected service from a run-time environment of each network location;

~~computer-readable program code that is configured to shutting~~ down the selected service at the origin server responsive to receiving the undeployment trigger, and removing executed code which implements the selected service from a run-time environment of the origin server; and


~~computer-readable program code that is configured to make~~ making the selected service unlocatable in the computing network.

4. Claims 25-26, 28, 31-44, 47, 52-57 are allowed.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hussein A. El-chanti whose telephone number is (571)272-3999. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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